**Statewide Perinatal Advisory Committee**
**Washington State Perinatal Level of Care (LOC) Guidelines**
**February 2005**

The Washington State Perinatal Level of Care (LOC) Guidelines were initially developed in 1988 and were revised in 1993 and 2001. These guidelines were created to help hospitals with obstetric and newborn care services to assess the type of patient best suited to their facility's capabilities and scope of care. The 2005 guidelines serve the same purposes as previous editions; that is, to outline general functions, patient descriptors, and resources for basic, intermediate and intensive care obstetrical and neonatal services. The document's primary objective is to provide clear definitions of perinatal-neonatal levels of care in Washington hospitals for use by clinical providers, health administrators, and state officials whose common goals are to

- improve the outcome of pregnancy
- increase access to care for pregnant women and newborns
- optimize allocation of resources

These goals call for the document to remain conservative. Each institution is encouraged to utilize the guidelines to assess and define its own scope of care**. However, the guidelines do not mandate that an individual unit must provide the entire scope of service within a Level of Care designation, nor are they meant to rigidly limit the scope of services if appropriate resources are available. In addition, it is recognized that modifications may be necessary so that both the objectives of the document and the unique goals of a hospital or region may be met.** For example, it is recognized that in some rural hospitals, the average daily census of neonates will be lower than that specified in the document in order to ensure access to care.

This is not a regulatory document. Washington State Certificate of Need uses this document as a reference for hospitals applying for Level II (intermediate care nursery and obstetric services II) or Level III (neonatal intensive care nursery and obstetric services III) designations. In addition to these guidelines, the Washington State Administrative Code (WAC) regulations may be useful. WACs are regulatory and must be met. Find web links to applicable WACs in Appendix B.

The Perinatal Advisory Committee revised this document by consensus after studying samples solicited from other states, and by drawing from the referenced published standards of care and clinical practice guidelines cited in Appendix A. "Levels of Neonatal Care", a 2004 policy statement from the American Academy of Pediatrics (Appendix A, ref 1) provided important guidance for the 2005 document. Health care providers are urged to remain informed regarding any updates/revisions of all referenced materials. In addition, input was solicited from the CEO in every Washington State hospital and from all nurse managers in Washington State hospitals with obstetrical/neonatal units. Many of these recommendations were incorporated in the final document.

**Washington State Perinatal Level of Care (LOC) Guidelines**
**February 2005**
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## General Functions

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| Diagnosis and management of **uncomplicated pregnancies, healthy term neonates, and those physiologically stable neonates born at 35-37 weeks gestation**<br><br>Neonatal resuscitation per Neonatal Resuscitation Program (NRP) guidelines *(ref 2)*<br><br>An established triage system for identification of complicated patients who require transport to a higher level of care facility<br><br>Stabilization of unexpected maternal or neonatal problems including the ability to stabilize unexpectedly small, preterm, or sick neonates for transport<br><br>Arrangements for primary care follow up for all newborns discharged per AAP guidelines *(ref3)* | Level I functions plus:<br><br>Diagnosis and management of **selected complicated pregnancies and neonates ≥ 34 0/7 weeks gestation and > 1500 grams**<br><br>Care of **mildly ill neonates** with problems that are expected to resolve rapidly and are not anticipated to need Level III services on an urgent basis<br><br>Management of recovering neonates who can be appropriately back-transported from a referral center<br><br>Arrangement for developmental follow-up for high risk neonates | Level IIA functions plus:<br><br>Diagnosis and management of **selected complicated pregnancies and neonates ≥ 32 0/7 weeks gestation and > 1500 grams**<br><br>Care of **moderately ill neonates** including those who may require conventional mechanical ventilation for brief duration (< 24 hrs) or **nasal CPAP** | Level IIB functions plus:<br><br>Diagnosis and management of **selected complicated pregnancies and neonates > 28 weeks gestation and > 1000 grams**<br><br>Care of **severely ill neonates** requiring conventional **mechanical ventilation**<br><br>Minor surgical procedures such as central venous catheter or inguinal hernia repair<br><br>May be a state contracted **regional perinatal center** *(4)*<br><br>Establishment of a **perinatal database for quality improvement and outcomes monitoring** | Level IIIA functions plus:<br><br>Diagnosis and management of **all complicated pregnancies and neonates at all gestational ages**<br><br>Advanced respiratory support (such as high frequency ventilation and inhaled nitric oxide)<br><br>Immediate consultation from pediatric surgical subspecialists for diagnosis of complications of prematurity and capabilities to perform surgery on-site or at a closely related institution, which would ideally be in geographic proximity and share coordinated care, such as physician staff. | If obstetrical services are offered, same functions as Level IIIB<br><br>**Full spectrum of medical and surgical pediatric subspecialists** that may include<br>• Neonatal open heart surgery<br>• Neonatal ECMO<br>• Pediatric organ transplantation |
| Mechanical ventilation may be provided for stabilization pending transport to a Level III facility | | | | | |

## Neonatal Patients: Services and Capabilities

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| **Healthy term neonates and those physiologically stable neonates born at 35-37 weeks gestation**<br><br>Mildly ill neonates whose transitional problems are resolving<br><br>Capabilities include<br>• Breastfeeding support per AAP and WHO guidelines *(ref5)*<br>• Controlled thermal environment<br>• Neonatal cardiorespiratory monitor for use during stabilization, assessment or observation prior to transport<br>• Neonatal pulse oximeter<br>• Device for blood glucose screening<br>• Gavage feeding<br>• Device for assessing blood pressure<br>• Hood oxygen/nasal cannula<br>• Peripheral IV insertion for fluids, glucose, and antibiotics prior to transport | Level I patients and services plus:<br><br>Neonates ≥ 34 0/7weeks gestation and > 1500 grams<br><br>Mildly ill neonates whose problems are expected to resolve rapidly and without need for CPAP, assisted ventilation, or arterial catheter<br><br>Neonates requiring supplemental oxygen but not > 60% after 1st 6 hrs<br><br>Management of recovering neonates who can be back-transported from a referral center<br><br>Capabilities include<br>• Space designated for care of sick/ convalescing neonates<br>• Cardiorespiratory monitor for continuous observation<br>• Peripheral IV insertion, maintenance and monitoring for fluids, glucose, antibiotics<br>• Neonatal blood gas monitoring<br><br>Average daily census of at least one - two Level II pts. | Level IIA patients and services plus:<br><br>Neonates ≥ 32 0/7 weeks gestation and > 1500 grams<br><br>Moderately ill neonates at low risk for needing mechanical ventilation beyond nasal CPAP<br><br>Capabilities include<br>• Umbilical or peripheral arterial catheter insertion, maintenance and monitoring<br>• Peripheral or central administration of total parenteral nutrition and/or medication and fluids<br><br>Capability may include conventional mechanical ventilation for brief duration (< 24 hrs) or nasal CPAP<br><br>Average daily census of at least two - four Level II patients | Level IIB patients and services plus:<br><br>Infants of > 28 wks gestation and > 1000 grams<br><br>Severely ill neonates at risk for or requiring mechanical ventilation<br><br>Capabilities for<br>• Prolonged conventional mechanical ventilation<br><br>• Minor surgical procedures such as central venous catheter or inguinal hernia repair<br><br>Average daily census of at least 10 Level II /Level III patients | Level IIIA patients and services plus:<br><br>Infants of all gestational ages<br><br>Capabilities<br>• To perform surgery to treat acute surgical complications of prematurity on-site or at a closely related institution, which would ideally be in geographic proximity and share coordinated care, such as physician staff.<br><br>• For advanced respiratory support (such as high frequency ventilation and inhaled nitric oxide)<br><br>• For advanced imaging with interpretation on an urgent basis, including CT, MRI and echocardiography<br><br>Average daily census of at least 10 Level II /Level III patients | Level IIIB patients and services plus:<br><br>Neonates who require<br>• Full spectrum of medical and surgical pediatric subspecialty care<br><br>May include capabilities for<br>• Open heart surgery<br>• Neonatal ECMO<br>• Pediatric organ transplantation<br><br>Average daily census of at least 10 Level II/III patients |

## Obstetrical Patients: Services and Capabilities

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| Uncomplicated pregnancies ≥ 35-37 weeks gestation<br><br>Capabilities include<br>• continuous electronic fetal monitoring<br><br>• initiate cesarean section within 30 minutes of decision to do so<br><br>• Management consistent with ACOG guidelines of potentially complicated births, but with low likelihood of neonatal or maternal morbidity *(ref6)*<br><br>• Stabilization and transport for unexpected maternal problems consistent with ACOG guidelines *(ref 6,7)* | Level I patients and services plus:<br><br>Pregnancies ≥ 34 0/7 weeks gestation and estimated birthweight > 1500 grams<br><br>Capabilities include management consistent with ACOG guidelines of selected high-risk pregnancy conditions such as *(ref 6)*<br><br>• complications not requiring invasive maternal monitoring or maternal intensive care<br><br>• preterm labor judged unlikely to deliver before 34 weeks gestation | Level IIA patients and services plus:<br><br>Pregnancies ≥ 32 0/7 weeks gestation and estimated birthweight > 1500 grams<br><br>Capabilities include management consistent with ACOG guidelines of selected high-risk pregnancy conditions such as *(ref 3)*<br><br>• preterm labor judged unlikely to deliver before 32 weeks gestation | Level IIB patients and services plus:<br><br>Selected complicated pregnancies > 28 weeks gestation and estimated birthweight more than 1000 grams<br><br>Capabilities include<br>• immediate cesarean delivery<br><br>• maternal intensive care | Level IIIA patients and services plus:<br><br>Pregnancies at all gestational ages<br><br>Capabilities include<br>• diagnosis and treatment of all perinatal problems | If obstetrical services are offered, same as Level IIIB patients and services |

# Patient Transport

<table>
<tr><th colspan="2">Basic Care</th><th colspan="2">Intermediate Care</th><th colspan="3">Intensive Care</th></tr>
<tr><th>Level I</th><th colspan="2">Level IIA</th><th>Level IIB</th><th>Level IIIA</th><th>Level IIIB</th><th>Level IIIC</th></tr>
<tr><td colspan="5">All hospitals demonstrate capabilities to stabilize and initiate transport of patients in the event of unanticipated maternal-fetal-newborn problems that require care outside the scope of the designated level of care. Access to return transport services may be a necessary capability for Level IIIA and Level IIIB intensive care nurseries.<br><br>Transport patients:<br>• Who are anticipated to deliver a neonate of earlier gestational age than appropriate for the facility's designated level of care in accordance with the law (ref 7) and should not transport if the fetus or mother is unstable or delivery is imminent (ref 3).<br><br>• Whose illness or complexity requires services with a higher level of care than provided at the admitting facility. For neonatal transport, refer to AAP reference titled, "Guidelines for Air and Ground Transport of Neonatal and Pediatric Patients (ref 8).<br><br>A hospital that transports patients to a higher level of care facility should:<br>• Demonstrate on-going relationships with referral hospital(s) for education, immediate consultation, urgent transport facilitation, and quality assurance<br><br>• Establish a written policy and procedure for maternal and neonatal transport that includes an established triage system for identifying patients at risk who should be transferred to a facility that provides the appropriate level of care<br><br>• Establish guidelines that ensure a provider's continuing responsibility for and care of the patient until transport team personnel or receiving hospital personnel assume full responsibility for the patient<br><br>A hospital that accepts maternal or neonatal transports in order to provide a higher level of care than is offered at the referral hospital, should:<br>• participate in perinatal and/or neonatal case reviews at the referral hospital<br>• collaborate with state contracted perinatal center for coordinating outreach education (ref 4)<br>• maintain a 24 hr/day system for reliable, comprehensive communication between hospitals for immediate consultation, initiation, and approval of maternal and newborn transports<br>• provide referring physicians with ongoing communication and recommendations for ongoing patient care at discharge</td><td>Level IIIB criteria excluding obstetrical care if not provided<br><br>Provides full spectrum of services; return transport may be necessary to make acute care beds accessible and for discharge planning closer to home</td></tr>
</table>

## Medical Director

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| Obstetrics: Board- eligible or certified in OB/GYN or family medicine<br><br>Nursery: Board-eligible or certified in pediatrics or family medicine<br><br>If the medical director is a family medicine physician, he or she may direct both services | Obstetrics: Board-certified in OB/GYN or family medicine<br><br>Nursery: Board –certified in pediatrics | Obstetrics: Board-certified in OB/GYN<br><br>Nursery: Board –certified in neonatology | Obstetrics: Board-certified in maternal-fetal medicine<br><br>Nursery: Board-certified in neonatology | | |

## Medical Providers

(Medical Providers section continued on next page)

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level III** | **Level IIIC** |
| | | | | | |
| Physician or credentialed obstetrical provider in-house, immediately available in late stage labor or when fetal or maternal complications are imminent or apparent<br><br>Every delivery is attended by at least one person whose sole responsibility is the baby, whose Neonatal Resuscitation Program (NRP) provider status is current, and who is capable of initiating newborn resuscitation *(ref 2)*<br><br>Another person is in-house and immediately available whose NRP provider status is current and who is capable of assisting with chest compressions, intubation, and administering medications *(ref 2)* | Level I coverage plus:<br><br>Every **high risk** delivery is attended by at least two people *(ref 2)*, one of whom is a pediatrician, family practice physician, or nurse with advanced practice capabilities, capable of a complete resuscitation, including assisting with chest compressions, intubation and administering medications | Level IIA coverage plus:<br><br>Continuous in-house presence of personnel experienced in airway management and diagnosis and treatment of pneumothorax when a patient is being treated with nasal CPAP or conventional mechanical ventilation. | Level IIA coverage plus:<br><br>Obstetrics: Immediate availability of an obstetrician with demonstrated competence in the management of complicated labor and delivery patients<br><br>Newborn: Immediate availability of neonatologist, pediatrician, or neonatal nurse practitioner with demonstrated competence in the management of severely ill neonates, including those requiring mechanical ventilation | | |

## Medical Providers (cont'd)

| Basic care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| Anesthesiologist or nurse-anesthetist available to initiate cesarean section within 30 minutes of decision to do so<br><br>Consultation arrangement with genetic counselor per written protocol | Level I staff plus:<br>Radiologist on-staff with daily availability who can interpret neonatal studies such as chest and abdominal radiographs, and cranial ultrasounds<br><br>Ophthalmologist with pediatric experience available to do eye exams for neonates who are at high risk for retinopathy of prematurity (ROP) if accepting back transport of such infants; written protocol for referral or treatment<br><br>Arrangement for neurodevelopmental follow-up or referral per written protocol | | Level II staff plus:<br><br>Obstetrical anesthesiologist or nurse anesthetist immediately available<br><br>Pediatric echocardiography services with written protocols for pediatric cardiology consultation, including videotape interpretation<br><br>Complete range of genetic diagnostic services and genetic counselor on staff; referral arrangement for geneticist and diagnostics per written protocol<br><br>Arrangement for perinatal pathology services | Level IIIA staff plus:<br><br>Anesthesiologist skilled in pediatric anesthesia on-call<br><br>Pediatric imaging, including CT, MRI and echocardiography services and consultation with interpretation available on an urgent basis. | Same as Level IIIB staff plus:<br><br>Full spectrum of medical and surgical pediatric subspecialists |

## Nurse:Patient Ratio

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |

Staffing parameters should be clearly delineated in a policy that reflects (a) staff mix and ability levels; (b) patient census, intensity, and acuity; and (c) plans for delegation of selected, clearly defined tasks to competent assistive personnel. It is an expectation that allocation of personnel provides for safe care of all patients in a setting where census and acuity are dynamic *(ref 3)*

Intrapartum:

- 1:2 patients in labor
- 1:2 induction or augmentation of labor
- 1:1 patients in second stage labor
- 1:1 patients with medical or obstetric complications
- 1:1 coverage for initiating epidural anesthesia
- 1:1 circulation for cesarean delivery

Antepartum/postpartum

- 1:6 patients without complications
- 1:4 recently born neonates and those requiring close observation
- 1:3-4 normal mother-baby couplet care
- 1:3 antepartum/postpartum patients with complications but in stable condition
- 1:2 patients in post-op recovery

Newborns

- 1:6-8 neonates requiring only routine care*****
- 1:4 recently born neonates and those requiring close observation
- 1:3-4 neonates requiring continuing care
- 1:2-3 neonates requiring intermediate care

- 1:1-2 neonates requiring intensive care
- 1:1 neonates requiring multisystem support
- 1:1 or greater unstable neonates requiring complex critical care

*****Reflects traditional newborn nursery care. A nurse should be available at all times, but only one may be necessary, as most healthy neonates will not be physically present in the nursery. Direct care of neonates in the nursery may be provided by ancillary personnel under the nurse's direct supervision. Adequate staff is needed to respond to acute and emergency situations. The use of assistive personnel is not considered in the nurse: patient ratios noted here.

## Nursing Management

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| *Nurse manager of perinatal services<br><br>and<br><br>*Nurse manager of nursery services<br><br>• Maintains RN licensure<br>• Directs perinatal and/or nursery services<br>• Guides perinatal and/or nursery policies and procedures<br>• Collaborates with medical staff<br>• Consults with higher level of care units as necessary<br><br>*One RN may manage both services but additional managers may be necessary based on number of births, average daily census, or number of full-time equivalents (FTEs). | Same as Level I | Same as Level I plus:<br><br>• Advanced degree is desirable | | | |

## Support Providers:
## Pharmacy, Nutrition/Lactation and OT/PT

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| **Pharmacy services**<br>Registered pharmacist immediately available for telephone consultation, 24 hrs/day and 7 days/wk<br><br>Provision for 24 hr/day access to emergency drugs | Registered pharmacist available 24 hrs/day and 7 days/wk | Registered pharmacist with experience in neonatal/perinatal pharmacology available 24 hrs/day, and 7 days/wk | Same as Level IIB | | |
| **Nutrition/Lactation:**<br>Dietary and lactation services and consultation available (*ref 5*) | One healthcare professional who is knowledgeable in<br>• management of special maternal and neonatal dietary needs<br>• enteral nutrition of low birthweight and other high-risk neonates.<br><br>Lactation services and consultation available<br><br>Diabetic educator for inpatient and outpatient services. | Same as Level IIA services plus:<br><br>One healthcare professional knowledgeable in<br><br>• management of parenteral nutrition of low birthweight and other high-risk neonates | At least one registered dietitian/nutritionist who has special training in perinatal nutrition and can plan diets that meet the special needs of high-risk mothers and neonates | | |
| **OT/PT Services**<br>Provide for inpatient consultation and outpatient follow-up- services | | | | | |

## Support Providers:
## Social Services/Case Management, Respiratory Therapy, Nurse Educator/Clinical Nurse Specialist

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| **Social services/case management**: Mechanism available for high-risk assessment and provision of social services | Level I services plus:<br><br>Personnel with relevant experience whose responsibilities include perinatal patients; specific personnel for discharge planning and education, community follow-up, referral process, and home care arrangements | Level IIA services plus:<br><br>At least one MSW with relevant experience whose responsibilities include perinatal patients; specific personnel for discharge planning and education, community follow-up, referral process, and home care arrangements | Level IIB services plus:<br><br>At least one full-time licensed MSW (for every 30 beds) who has experience with socioeconomic and psychosocial problems of high-risk mothers and babies, available 7 days/wk and 24 hrs/day | | |
| **Nurse educator/ Clinical Nurse Specialist** | | | A nurse educator or clinical nurse specialist with appropriate training in intensive neonatal or perinatal care to coordinate staff education and development. Those educators already in this position should be grandfathered in until post-graduate education is completed. | | |
| **Respiratory Therapy**: The role of a Respiratory Care Practitioner is prescribed by the medical director and clearly delineated per written protocol. If attending deliveries or providing neonatal respiratory care, should have current NRP Provider status | Same as Level I | Same as Level I plus: Respiratory Care Practitioner with documented competence and experience in the management of neonates with cardiopulmonary disease; when CPAP in use, an RCP should be in-house and immediately available | Level IIB plus:<br><br>1 Respiratory Care Practitioner : 6 or fewer ventilated neonates with additional staff for procedures | | |

## X-Ray/Ultrasound

| Basic Care | Intermediate Care | | Intensive Care | | |
|---|---|---|---|---|---|
| **Level I** | **Level IIA** | **Level IIB** | **Level IIIA** | **Level IIIB** | **Level IIIC** |
| Portable x-ray and ultrasound equipment available to Labor & Delivery and Nursery within 30 minutes<br><br>Performance and interpretation of neonatal x-rays and perinatal ultrasound available 24 hrs/day<br><br>Antepartum surveillance techniques available | Level I services plus:<br><br>Ultrasound equipment immediately accessible and available to the Labor and Delivery unit 24 hrs/day | | Level IIB services plus:<br><br>Advanced level ultrasound available to Labor & Delivery and Nursery on-site and on a daily basis | | If obstetrical services are offered, same as Level IIIA/B |

## Laboratory and Blood Bank Services

<table>
<tr><th>Basic Care</th><th colspan="2">Intermediate Care</th><th colspan="3">Intensive Care</th></tr>
<tr><td>Level I</td><td>Level IIA</td><td>Level IIB</td><td>Level IIIA</td><td>Level IIIB</td><td>Level IIIC</td></tr>
<tr><td>LABORATORY<br>Laboratory technician available 24 hrs/day, present in the hospital or within 30 minutes<br><br>Capability to report laboratory results in a timely fashion</td><td colspan="2">Same as Level I plus:<br>Lab technician in-house 24 hrs/day<br><br>Personnel skilled in phlebotomy and IV placement in the newborn immediately available 24 hrs/day<br><br>Microtechnique for hematocrit and blood gases within 15 minutes</td><td colspan="3">Comprehensive services available 24 hrs/day</td></tr>
<tr><td colspan="6">BLOOD BANK<br>Blood bank technician on-call and available w/in 30 minutes for performance of routine blood banking procedures<br><br>Provision for emergent availability of blood and blood products</td></tr>
</table>

**APPENDIX A**
**References and Resources***
**(Resources continue on page 17)**

**1. Levels of Neonatal Care**
American Academy of Pediatrics. 2004. Levels of Neonatal Care. *Pediatrics* 114 (5), 1341-1347.
**Online at**: http://www.pediatrics.org/cgi/content/full/114/5/1341

**2. Neonatal Resuscitation Program (NRP) (Note: NRP revisions expected 2006)**
American Academy of Pediatrics and American Heart Association. 2000. *Textbook of Neonatal Resuscitation, 4th edition*. Kattwinkel J, editor. Elk Grove Village, IL: American Academy of Pediatrics.
**Or**
Kattwinkel J et al. 1999. An Advisory Statement from the Pediatric Working Group of the International Liaison Committee on Resuscitation. Pediatrics 103(4), e56

**Or on-line at:** http://circ.ahajournals.org/cgi/reprint/112/24_suppl/IV-188

**3. Guidelines for Perinatal Care**
American Academy of Pediatrics and American College of Obstetricians and Gynecologists. 2002. Guidelines for Perinatal Care, 5th edition. Gilstrap LC and Oh W. (eds.) Elk Grove Village, IL: American Academy of Pediatrics.

**4. Regional Perinatal Centers** provide education and consultation in four geographic locations across the state. For information, go to http://www.doh.wa.gov/cfh/mch/regional_perinatal_programs.htm

**5. Breastfeeding support**
American Academy of Pediatrics Section on Breastfeeding. 2005. Breastfeeding and the Use of Human Milk. Pediatrics 115(2), Feb 2005, pp 496-506.

**Or on-line at**: http://aappolicy.aappublications.org/cgi/reprint/pediatrics;115/2/496.pdf

**OR** Department of Health and Human Services Office on Women's Health. HHS Blueprint for Action on Breastfeeding. 2000. Washington D.C.
**On-line at**: http://www.4woman.gov/Breastfeeding/blueprntbk2.pdf
UNICEF: Ten Steps to Successful Breastfeeding **on-line at:** http://www.unicef.org/nutrition/facts_breastfeeding.html

**6. ACOG Guidelines**
Committee Opinions; Educational/Practice Bulletins, use the ACOG 2004 Compendium of Selected Publications (or most recent year of publication).
**On-line at**: http://sales.acog.com/acb/stores/1/product1.cfm?SID=1&Product_ID=247

* **Health care providers are urged to remain informed regarding any updates/revisions of all referenced materials. AAP statements published after 2002 are revised at least every 5 years**

**References and Resources* (cont'd)**


**7. Interhospital Transport**
American College of Emergency Physicians (ACEP). Appropriate Interhospital Patient Transfer. Policy # 400143. February 2002.

**On-line at**: http://www.acep.org/webportal/PracticeResources/PolicyStatements/pracmgt/AppropriateInterhospitalPatientTransfer.htm

**8. Neonatal Transport**
American Academy of Pediatrics; "Guidelines for Air and Ground Transport of neonatal and Pediatric Patients" 2nd edition.
**On-line at**: http://www.aap.org/bst/showdetl.cfm?&DID=15&Product_ID=912

**9. Hospital Stay for a Healthy Newborn** PEDIATRICS Vol. 113 No. 5 May 2004, pp. 1434-1436

**On-line at** http://aappolicy.aappublications.org/cgi/reprint/pediatrics;113/5/1434.pdf

10. **Clinical Practice Guideline: Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks Gestation**
PEDIATRICS Vol. 114 No. 1 July 2004, pp. 297-316

**Online at**: http://aappolicy.aappublications.org/cgi/reprint/pediatrics;114/1/297.pdf

**11. Safe Transportation of Newborns at Hospital Discharge**
PEDIATRICS Vol. 104 No. 4 October 1999, pp. 986-987

**Online at**: http://aappolicy.aappublications.org/cgi/reprint/pediatrics;104/4/986.pdf

**12. 2000 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs**

**Online at:** http://aappolicy.aappublications.org/cgi/reprint/pediatrics;106/4/798.pdf

**13. Healthy People 2010**. Increase the proportion of very low birth weight (VLBW) infants born at Level III hospitals or subspecialty perinatal centers. Vol II, 2nd edition. United States Dept of Health and Human Services. **On-line at**:
http://www.healthypeople.gov/document/HTML/Volume2/16MICH.htm#_Toc494699664


*** Health care providers are urged to remain informed regarding any updates/revisions of all referenced materials. AAP statements published after 2002 are revised at least every 5 years.**

**Appendix B**
**On the Web: Washington State Laws about Perinatal/Neonatal Services**

Washington State laws (WACs) are located on-line here:

http://apps.leg.wa.gov/wac/default.aspx?cite=246

Click on Facility Standards and Licensing (246-320).

There you will see the WACs for

- Obstetrical delivery facilities (246-320-655)
- Labor/delivery, LDRs, and LDRPs (246-320-665)
- Newborn Nursery (246-320-705)
- Intermediate Level II nursery and NICU Level III (246-320-715)

And Definitions (246-320-010) below taken from: http://apps.leg.wa.gov/WAC/default.aspx?cite=246-320-010

(45) "Intermediate care nursery" means an area designed, organized, staffed, and equipped to provide constant care and treatment for mild to moderately ill infants not requiring neonatal intensive care, but requiring physical support and treatment beyond support required for a normal neonate and may include the following:

(a) Electronic cardiorespiratory monitoring;
(b) Gavage feedings;
(c) Parenteral therapy for administration of drugs; and
(d) Respiratory therapy with intermittent mechanical ventilation not to exceed a continuous period of twenty-four hours for stabilization when trained staff are available.

(63) "Neonatal intensive care nursery" means an area designed, organized, equipped, and staffed for constant nursing, medical care, and treatment of high-risk infants who may require:

(a) Continuous ventilatory support, twenty-four hours per day;
(b) Intravenous fluids or parenteral nutrition;
(c) Preoperative and postoperative monitoring when anesthetic other than local is administered;
(d) Cardiopulmonary or other life support on a continuing basis.

(64) "Neonatologist" means a pediatrician who is board certified in neonatal-perinatal medicine or board eligible in neonatal-perinatal medicine, provided the period of eligibility does not exceed three years, as defined and described in *Directory of Residency Training Programs* by the Accreditation Council for Graduate Medical Education, American Medical Association, 1998 or the *American Osteopathic Association Yearbook and Directory*, 1998.

## APPENDIX C
## Statewide Perinatal Advisory Committee (PAC)
## Subcommittee on 2005 Perinatal Level of Care (LOC) Guidelines Document

| NAME | AFFILIATION |
|---|---|
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## APPENDIX D
## Contributors and Reviewers

The LOC Subcommittee wishes to acknowledge and thank those who participated in the review and comment process for the 2005 edition of the Level of Care Guidelines.

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- Children's Hospital and Regional Medical Center, Seattle
- Deaconess Medical Center, Spokane
- Forks Community Hospital, Forks
- Franciscan Health System, Federal Way
- Frank E Otto, Family Medicine, Spokane
- Grays Harbor Community Hospital, Aberdeen
- Group Health Cooperative, Seattle
- Harrison Hospital, Silverdale
- Island Hospital, Anacortes
- Kadlec Medical Center, Richland
- Legacy Health Systems, Vancouver
- Mason General Hospital, Shelton
- Overlake Hospital Medical Center, Bellevue
- Prosser Memorial Hospital, Prosser
- Providence Centralia Hospital, Centralia
- Providence Everett Medical Center, Everett
- Sacred Heart Medical Center, Spokane
- Skagit Valley Hospital, Mt Vernon
- Southwest Washington Medical Center, Vancouver
- Stevens Hospital, Edmonds
- Sunnyside Community Hospital, Sunnyside
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Additional reviewers from unidentified hospitals who described their services as:

- Suburban, Eastern Washington
- Rural, Level I, Central Washington
- Rural, Level I, Eastern Washington